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Stout Institute

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Courses of Study
1911-1912

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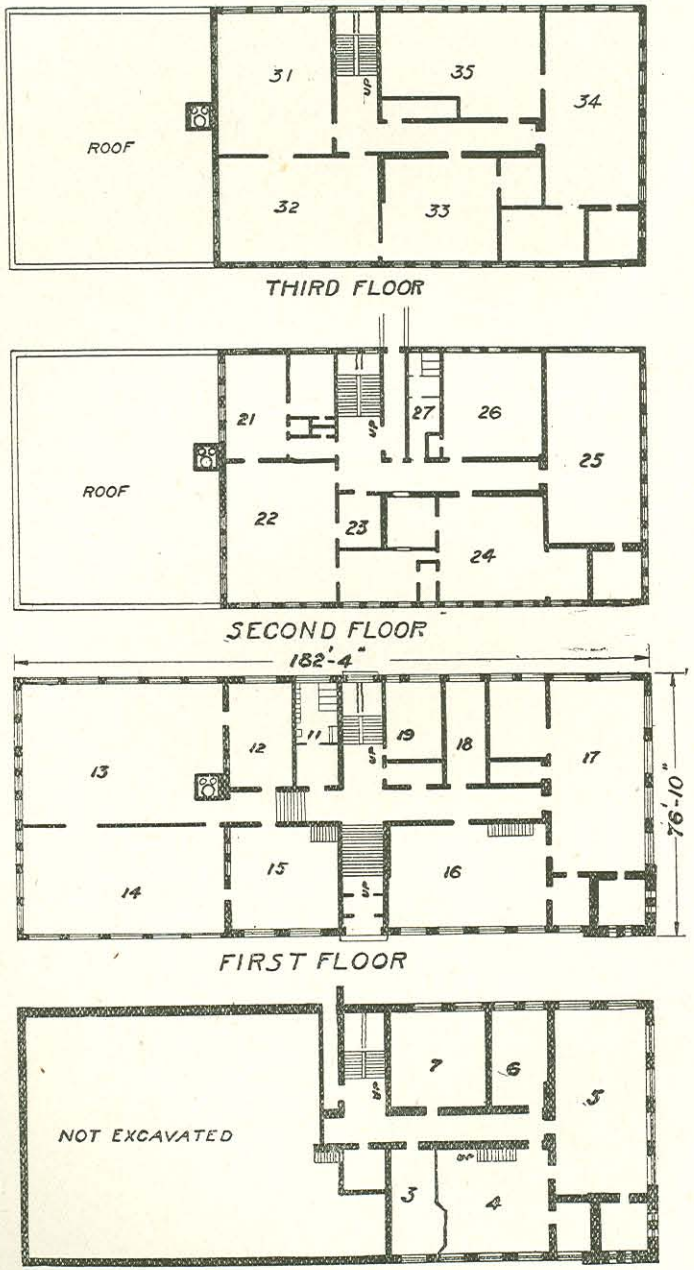
STOUT INSTITUTE BULLETIN

ANNOUNCEMENT

1911-1912



PLANS OF MAIN BUILDING---STOUT INSTITUTE

(SEE KEY TO BUILDING PLAN, BACK OF TITLE PAGE)

Vol. VI March 1911 No. 1

STOUT INSTITUTE BULLETIN

CONTENTS

I. OFFICERS AND FACULTY
II. GENERAL INFORMATION
III. MANUAL TRAINING DEPARTMENT
IV. DOMESTIC ECONOMY DEPARTMENT
V. HOMEMAKERS DEPARTMENT
VI. TRADES DEPARTMENT
VII. PROFESSIONAL WORK
VIII. DRAWING COURSES
IX. METAL WORKING
X. WOODWORKING
XI. FOODS AND COOKERY
XII. SCIENCE GROUP
XIII. DOMESTIC ART
XIV. GENERAL COURSES
XV. GROWTH OF STOUT INSTITUTE
XVI. INDEX OF COURSES

ANNOUNCEMENT FOR SCHOOL YEAR, 1911-1912

PUBLISHED QUARTERLY BY STOUT INSTITUTE
AT MENOMONIE, WISCONSIN

STOUT INSTITUTE BULLETIN

The Bulletin is issued four times during the year:—March-June-September-December.

It covers the application of the principles of technical and household arts and sciences to public school conditions and indicates how these subjects are being developed in Menomonie.

The subscription price is fifty cents per year. Sample copies will be sent upon request.

CALENDAR FOR 1911-1912

1911

June 9—Eighth Regular Session ends
July 31—Sixth Summer Session begins
September 1—Summer Session ends
September 11—Ninth Regular Session begins

1912

January 26—First Semester ends
January 29—Second Semester begins
June 7—Ninth Regular Session ends

December 19, 1911-January 3, 1912—Holiday vacation
March 22, 1912-April 1, 1912—Spring vacation

KEY TO BUILDING PLAN

3 Engine room
4 Planing mill
5 Elementary shop
6 Dry kiln
7 Locker room
11 Lavatory
12 Cupola room
13 Forge shop
14 Machine shop
15 Molding
16 Wood turning
17 Joinery
18 Finishing
19 M. T. office
21 Sewing
22 Dressmaking
23 D. E. office
24 Kitchen
25 Drawing
26 Lecture
27 Lavatory
31 Biology
32 Sewing
33 Millinery
34 Drawing
35 Lecture

ANNOUNCEMENT

FOR THE

NINTH ANNUAL SESSION

OF

STOUT INSTITUTE

AT

MENOMONIE, WISCONSIN

1911-1912

I

OFFICERS AND FACULTY

OFFICERS OF ADMINISTRATION

J. H. Stout, President of Board of Trustees—deceased
L. D. Harvey, President of Stout Institute, Vice President of Board of Trustees
W. H. Hatton, Member of Board of Trustees
Geo. R. Peck, Member of Board of Trustees
W. C. Ribenack, Secretary of Board of Trustees and Treasurer of Stout Institute

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Grace Fisher, Director of Domestic Economy Training School
H. W. Jimerson, Director of Plumbing Trade School
W. H. Hefelfinger, Director of Bricklaying Trade School
Mrs. Josephine W. Hobbs, Director of Homemakers School

Edith Dahlberg, Matron Bertha Tainter Hall
Pearl McDonald, Preceptress Bertha Tainter Hall Annex
Francesca L. Otto, Registrar
Adalin M. Wright, Secretary
Katherine A. Hahn, Librarian
Emma Olson, Bookkeeper
Ebba H. Nesseth, Clerk

L. D. Harvey, Psychology and Pedagogy

Milton College, 1872; Ph. D. 1898. High school principal, 1873-1879; city superintendent, 1880-1885; normal schools, 1885-1898; state superintendent, 1889-1902; superintendent Stout Training Schools, 1903-1908; president Stout Institute, 1908-

George Fred Buxton, Organization and Literature of Manual Training, Drawing and Design

Pratt Institute, 1899; Teachers College, Columbia University, 1904; University of Wisconsin, summer 1908. Teacher of manual training, Newark, New Jersey, 1899-1901; Portland, Maine, 1901-1903; Springfield, Massachussetts, 1904-1905; Ohio State University, summers, 1909-1910; director manual training department, Stout Training Schools, 1905-1908; Stout Institute, 1908-

Leo Ammann, Machine Shop Practice

St. Louis Manual Training School, 1893; Cornell University, mechanical engineering, 1897; Federal Polytechnikum, Zurich, Switzerland, post-graduate work, 1898. Teacher in St. Louis Manual Training School, 1901-1905; Stout Training Schools, 1905-1908; Stout Institute, 1908-

Robert Promberger, Elementary Cabinet Making, Furniture Making, Wood Finishing

Pratt Institute, 1897; student von Ridingsvaard school of wood carving, summer 1899; Cincinatti art school, 1901; University of Missouri, extension, 1906; University of Pittsburgh, summers, 1907-1908; machine shops, Milwaukee, 1888-1896. Supervisor manual training, Oshkosh, Wis., 1897-1899; teacher of shop work, Cincinnati Technical school, 1899-1903; Indianapolis high school, 1903-1905; Kansas City high school, 1905-1906; Pittsburgh schools, 1906-1910; Stout Institute, 1910-

Wm. T. Elzinga, Pattern Making, Foundry Practice; Forging

Apprenticed instrument maker, Amsterdam, Holland, 1887-1891; student Mechanics Institute, New York City, 1902-1903; machinist and erector, metal pattern maker and tool maker with several prominent manufacturers, 1892-1903. Instructor forge and foundry practice, Pennsylvania State College, 1903-1904; instructor forge and foundry practice, Colorado State College, 1904-1908; Stout Institute, 1908-

Fred L. Curran, Elementary Woodwork, Primary Handwork, History of Manual Training

State Normal School, Stevens Point, Wis., 1905; Stout Institute, 1908; Bradley Polytechnic Institute, summers, 1908, 1909. Teacher in public schools, 1898-1903; principal state graded schools, 1905-1907; Stout Institute, 1908-

George G. Price, Mechanical Drawing, Literature of Manual Training

State Normal School, Oshkosh, Wis., 1903; post graduate, 1904; Stout Institute, 1909; University of Chicago, summer, 1903; Bradley Institute, summer, 1908; University of Wisconsin, summer, 1909. Principal of ward school, Iron Mountain, Mich., 1904-1907; director manual training, Fond du Lac, Wis., 1908-1909; principal and teacher of manual training, Lincoln school, Wausau, Wis., 1909-1910; Stout Institute, 1910-

H. W. Jimerson, Plumbing and Gas Fitting

Journeyman and contractor, 1884-1904; director Minneapolis School of Plumbing, 1904-1908; director Plumbing Trade School, Stout Institute, 1908-

W. H. Hefelfinger, Bricklaying, Cement Work

Williamson School of Mechanical Trades, 1905. Journeyman and contractor, 1905-1908; director Bricklaying Trade School, Stout Institute, 1908-

O. C. Mauthe, Physical Training

Normal School of North American Gymnastic Union, Milwaukee, 1895; Harvard University summer school of physical training, 1897; Chautauqua, N. Y., summer school, 1899: Gilbert Normal School of aesthetics and social dancing, Boston, summer, 1904. Physical director, Turnverein Vorwaerts, Milwaukee, 1895-1896; West Minneapolis Turnverein, Minneapolis, 1896-1899; special instructor, Harvard University, summers, 1898, 1902, 1903; physical director, Dayton Turngemeinde, and Young Women's League, Dayton, O., 1899-1903; physical director, Shreveport Athletic Association, Shreveport, La., 1903-1909; supervisor of games, Dayton vacation schools, 1904; supervisor of playgrounds, Shreveport, La., 1905-1909; physical director, Stout Institute, 1909-

Grace Fisher, Organization of Domestic Science, Household Management, Dietetics

Utah Agricultural College, 1904; Teachers College, Columbia University, 1908. Instructor in history and English, preparatory department, Utah Agricultural College, 1904-1905; instructor in domestic science, Utah Agricultural College, 1905-1907; supervisor of domestic science, Throop Institute, 1908-1909; director of domestic economy department, Stout Institute, 1909-

Pearl MacDonald, Physiology, Food Study

University of Michigan, 1898; Teachers College, Columbia University, 1906. High school teacher, 1898-1905; teacher of domestic science, public schools, 1906-1907; director of domestic science department, Michigan Agricultural College, 1907-1910; Stout Institute, 1910-

Wilhelmina H. Spohr, Advanced and Demonstration Cooking, Food Study, Physiology and Hygiene, Home Nursing

Kansas State College, 1897; Stout Institute, 1907. Teacher public schools, Manhattan, Kansas, 1897-1906; Calumet, Michigan, 1907-1908; Stout Institute, 1908-

Daisy A. Kugel, Physiology and Hygiene, Cooking, Home Nursing

University of Michigan, 1900; Teachers College, Columbia University, 1908. Teacher in public schools, 1902-1906; Stout Institute, 1909-

Hattie R. Dahlberg, Elementary Cooking, Model Sewing

Stout Institute, 1906. Teacher of domestic science and art, Viroqua, Wis., 1907-1908; Antigo, Wis., 1908-1909; Marathon County Agricultural School, 1909-1910; Stout Institute, 1910-

Zella I. Perkins, Chemistry, Biology

University of Idaho, 1903; University of Chicago, M. S., 1906. Assistant in pure food department, University of Idaho, 1903-1904; teacher of science in Colfax high school, Washington, 1904-1905; Stout Training Schools, 1906-1908; Stout Institute, 1908-

Jessie F. Cross, Inorganic Chemistry, Food Chemistry

Ohio University, 1906; Ohio State University, 1909. Instructor in chemistry, Stout Institute, 1909-

Mabel H. Leedom, Chemistry, Biology

City Normal School, Dayton, Ohio, 1894; Stout Institute, 1910. Teacher in public schools, Dayton, Ohio, 1895-1905; Stout Institute, 1910-

Edith Dahlberg, Dressmaking

Stout Institute, 1905. Teacher Marinette County School of Agriculture and Domestic Economy, 1906-1909; Stout Institute, 1910-

Lurene Seymour, Dressmaking, Textiles, Millinery, Art Needlework

University of Michigan, 1895; New York University, 1905; Teachers College Columbia University, 1907. Teacher, Lake Linden, Michigan, high school, 1895-1898; Decatur, Illinois, high school, 1898-1906; Stout Training Schools, 1907-1908; Stout Institute, 1908-

Elizabeth A. Lathrop, Art Needlework, Textiles

Boston School of Domestic Science, 1905; Teachers College, Columbia University, 1910. Teacher of domestic art, Atlanta University, Atlanta, Ga., 1905-1908; Stout Institute, 1910-

Anna McMillan, Model Sewing, Plain Sewing, Primary Handwork

Stevens Point Normal, 1899; Stout Training Schools, 1908. Grade teacher, 1899-1905; teacher of domestic science, Stevens Point Normal School and Grand Rapids, Wis., public schools, 1908; Stout Institute, 1909-

Josephine W. Hobbs, Cooking, Model and Plain Sewing

Cook County, Ill., normal school, summers, 1894-1897; Boston School of Domestic Science, 1907. Teacher in public schools, Dubuque, 1898-1906; supervisor domestic science and matron, Moore Street Neighborhood House, Cambridge, Mass., 1907-1908; superintendent, Y. W. C. A., Training School for Household Service, Boston, 1908-1909; director, Homemakers School, Stout Institute, 1909-

Grace R. Darling, English, Home and Social Economics

University of Michigan, 1884; Teachers College, Columbia University, 1892; Wisconsin Library School, Madison, Wis., 1907. Teacher of history and literature, State normal school, Oshkosh, Wis., 1884-1891; teacher of history and literature, State normal school, Milwaukee, Wis., 1895-1903; Stout Institute, 1908-

Ruth Mary Phillips, English

University of Wisconsin, 1904; graduate work, University of Wisconsin, summer session, 1905, and one semester, 1909. Teacher in high school, Lodi, Wisconsin, 1904-1905; teacher in high school, Black River Falls, Wisconsin, 1906-1910; Stout Institute and Menomonie high school 1910-

Kate Murphy, Interior Decoration and Furnishing, Freehand Drawing

St. Louis School of Fine Arts, 1889; New York School of Technical Design, 1890; New York Studios, 1890-1892; student in European Art Schools, 1908-1909. Director art department, Elmwood Normal School, Farmington, Mo., 1888-1889; teacher of drawing in public schools of Chicago, 1893-1894; director art department Menomonie public schools and Stout Training Schools, 1894-1907; Stout Institute, 1908-

Jeanne Tyrrell, Physical Training

Sargeant Normal School of Gymnastics, 1910. Stout Institute, 1910-

II

GENERAL INFORMATION

LENGTH OF COURSE

COURSES leading to the diploma granted by each of the training schools for teachers require two years work. No diploma will be issued to any person who has not been a student in residence for at least one year. Upon the completion of one of these courses,—Manual Training or Domestic Economy,—a diploma is issued, which by statute, is made the basis for the issuance of a life certificate, after one year's successful teaching in Wisconsin.

This certificate legally qualifies the holder to teach the subjects in which training has been taken, in the public schools of the state. The certificate is issued by the State Board of Examiners and is accepted in most of the other states.

QUALIFICATIONS FOR ADMISSION

Graduation from a four year's high school course, or equivalent preparation, will be required for admission to each of the training courses. The candidate must be at least eighteen years of age, and must be possessed of good health and physical energy, of refinement and good character. Testimonials of good character are required.

Students who have had Normal School or Collegiate training will be given credit for such of the required work in the Institute courses as they have satisfactorily mastered. Successful experience in teaching before entering the Training School, in most cases, reduces the amount of practice teaching required of the student.

ADVANCE ENROLLMENT

School accomodations limit the number of students who can be enrolled; for this reason persons who wish to enter should make application in advance for an enrollment blank, which should be filled out and forwarded to the school with physician's certificate, and two certificates of good character. Enrollment is made in the order of application.

THE DEMAND FOR GRADUATES

The demand for the graduates of Stout Institute as teachers of manual training and domestic economy is steadily increasing year by year. At the present time they are teaching or doing supervisory work in thirty-five states and in Porto Rico.

The number of schools in which manual training and domestic art and science are being taught is rapidly increasing and the demand for well trained teachers of these subjects is greater than ever before.

The officers of the Institute are glad to recommend teachers to school officials who are seeking competent teachers of manual training and domestic art and science. In making recommendations every effort is made to name candidates who by training, temperament, personality, and experience

are adapted to the demands of the position to be filled. The more complete and definite the information furnished as to the kind and amount of work required, and the salary to be paid, the better they are prepared to select the person most likely to give satisfactory service. They prefer to make no recommendation unless they feel confident that they can name a candidate who will succeed.

THE SUMMER SESSION

Stout Institute Summer Session offers exceptional opportunities for supervisors or special teachers of manual training, domestic art and science, or freehand drawing to advance themselves along their special lines, either in tecnique or along the professional side. Superintendents and principals are finding these summer sessions an opportunity for learning something of the content and method of school handwork. Grade teachers are perfecting themselves in handling special subjects through summer courses.

Provision is made for outings and games so that a vacation may be combined with a summer course of study.

Fifty-five courses are offered in the summer session of 1911. The session begins July 31, and ends September 1. The December number of the bulletin gives full information concerning the courses offered in the summer session.

SCHOOL EXPENSES

Tuition is one hundred dollars per year, one-half payable at the beginning of each semester. A fee of fifteen dollars per year is charged to cover the cost of materials used by the students in the manual training department and ten dollars in the domestic economy department. Students taking work in any courses not required for graduation, are charged an additional fee to cover actual cost of material used in such courses.

Board and room can be obtained at prices ranging from four and a half to six dollars per week in private families.

LABORATORY FEES

In the science courses minimum fees are charged for laboratory work. The fees for the regular course are as follows:

General Chemistry	$5.00
Food Chemistry and Chemistry of Cleaning	2.50
Biology	5.00
Physiological Chemistry	5.00
Food Adulteration	2.50

In addition to the laboratory fee, students are expected to pay for any breakage which may occur.

LIBRARY AND READING ROOM FEES

A fee of five dollars, payable at the opening of the school year is required of each student.

All necessary text books are furnished from the loan text book library for the school year without any extra charge to students.

The reference library is supplied with standard reference books

needed to supplement the text books in different subjects and with educational and technical periodicals adapted to the needs of the students.

REFUNDS

Students who are compelled to withdraw from the Institute by reason of illness are entitled to a refund of tuition from the date when notice is received of such withdrawal, to the end of the semester.

Students boarding in the dormitories are also entitled to a refund of whatever amount has been advanced for board beyond the date when notice is received of withdrawal. Refund for advance payment for room rent in the dormitories is allowed from the date when the room is again rented, and effort is made to secure an occupant at the earliest date possible. As books and supplies for which fees are charged have to be bought in advance in quantities necessary to supply the entire enrollment no refund of fees is made in any case.

UNIFORMS

Young women attending the Institute are required to wear uniforms during the daily sessions.

A gymnasium suit is required of each student taking physical training. This work is optional for students in the domestic science department.

Special information regarding uniforms and gymnasium suits is sent to prospective students upon application.

DORMITORIES

Bertha Tainter Hall accommodates about thirty young ladies. The Hall is furnished with all modern conveniences, the rooms are electric lighted, and heated both by direct and indirect radiation, thus assuring ample heat and good ventilation. A large reception room, a music room, and a reading and study room for those who may prefer to study there rather than in their rooms, are provided. The hall is three blocks from the school grounds, overlooks Lake Menomin, and is in the midst of spacious, well-kept, well-wooded grounds. It is the aim to make this an ideal home for such students as wish to avail themselves of its accommodations. The home is in charge of a woman of experience and culture, and such regulations and supervision are maintained as insure proper conditions for health, effective work and the proper social life of students.

Tainter Annex accommodates fifty young ladies and is situated on the same grounds with Bertha Tainter Hall. It is thoroughly suited to the purposes for which it was planned. It has a large central living room with two balconies and skylight above, making an attractive place for rest and social activities. The rooms are all arranged in suites of study and sleeping room, each suite for two students. A large dining room in Bertha Tainter Hall provides meals for students in both halls.

The charge for room for the school year for each student is sixty to eighty dollars according to the size and location of room. In most cases the lower rate prevails. The charge for meals and a definite amount of laundry work for each student rooming in the Halls is four dollars and fifty cents per week. The amount of laundry work done under the above

arrangement is the average amount each student requires weekly. A list of the different articles laundered weekly without additional charge is furnished each student. Articles not included in this list are laundered at a reasonable rate at the Institute laundry.

HOMEMAKERS DORMITORIES

Two cottages furnishing home accommodations for sixteen students are provided for the students taking the Homemakers course. The cost for room and board is the same as in the Halls.

SCHOOL YEAR

The school year is thirty-six weeks in length, beginning September 11, 1911, and ending June 7, 1912. Students should arrange to enter at the beginning of the school year if possible. When this is not possible students may enter at the beginning of the second semester.

The summer session is five weeks in length, beginning July 31, 1911, and ending September 1, 1911.

Address all correspondence regarding courses of study or general work of the Institute to

L. D. HARVEY,
President Stout Institute,
Menomonie, Wisconsin.

III

MANUAL TRAINING DEPARTMENT

A TRAINING school for teachers of manual training was started in 1903 with three students and has had a steady growth year by year to its present enrollment of seventy-three.

1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11
3	15	20	27	41	46	63	73

It has aimed to meet the increasing demand for well trained teachers of mechanical drawing and shop work in public schools. Its aim has been very specific and there is abundant proof that it has realized its aim. The needs of public school pupils are kept constantly in mind and every effort is made to provide for the actual conditions of the class room. A large amount of time is given to the shop work, and the student is required to develop skill in the handling of tools in several different shops. An important feature is the work in observation of classes and in practice teaching, where typical conditions prevail. While emphasis is placed upon a mastery of the things immediately needed in the schools, reasonable time is given to a study of the principles of teaching and the history of the subject.

During the entire course, regular exercise in the gymnasium is required of all manual training students, and considerable attention is given to the problem of teaching gymnastics and of coaching athletics. There is a growing tendency in the schools to offer physical training, and in many of them it is necessary for the manual training teacher to handle the physical training. A first class gymnasium and natatorium provide adequate facilities for this line of work at Stout Institute.

While the requirements for entrance remain the same each year—graduation from a four year high school course—yet every year brings a larger number of students with advanced training in college or normal or technical school, and many with a good teaching experience. While it is not always possible for these older students to spend two full years at Stout Institute, many of them find it possible to complete their studies later in summer sessions, and courses are arranged to meet their needs.

The demand for graduates increases each year, and the supply is at present about one student to every eight manual training positions for which the Institute is requested to furnish teachers. The variety of positions includes: teaching in grammar grades and in high schools, supervising manual training in public schools, and directing the work in normal schools, teaching one special subject in large city schools, and in teaching more subjects in smaller places.

The general scope of courses offered is as follows:

Professional work:—psychology and pedagogy; observation and practice teaching, organization of manual training, literature of manual training, planning of manual training courses of study, shop equipment.

Drawing Courses:—elements of mechanical drawing, advanced mechanical drawing, freehand drawing, manual training design.

Metalworking Courses:—machine shop practice, forging, foundry practice, art metal work, bent iron work, and tinsmithing.

Woodworking Courses:—elementary woodwork, elementary carpentry, joinery, wood turning, cabinet making, pattern making, wood carving and wood finishing.

General Courses:—clay work, paper, and cardboard construction, basketry and weaving, special shop work, bricklaying, cement work, plumbing, English, and physical training.

MANUAL TRAINING SCHEDULE 1911-1912

JUNIOR YEAR	Periods
Psychology and pedagogy	108
History of manual training	24
Literature of manual training	24
English	90
Freehand drawing	48
Design	72
Elementary mechanical drawing	60
Projection drawing	72
Paper and cardboard construction	48
Weaving, basketry, and bent iron	48
Clay work	48
Elementary woodwork	60
Wood turning	60
Elementary cabinet making	60
Joinery	72
Special shop work	72
Elementary forging	60
Elementary machine shop work	36
Cement work	60
Bricklaying	36
Plumbing	36
Physical training	180
Class talks	36
Total	1410

SENIOR YEAR	Periods
Organization of manual training	36
Courses of study	36
Shop equipment	36
Literature of manual training	36
Observation and practice teaching	216
Drawing and design	72
Architectural and machine drawing or Machine shop work	270
Machine drawing or Cement work	144
Upper grade woodwork or Advanced forging	108
Pattern making or Machine shop work	270
Pattern making or Advanced cabinet making	144
Plumbing or Bricklaying or Machine shop work	108
Physical training	144
Class talks	36
Total	1656

Every student taking full work for the manual training diploma must take all of the work given in the junior year. Every senior must take the full number of periods of work, but must select one course in each place where a choice is offered in the above schedule. It is required that at least one course in mechanical drawing be taken during the senior year.

It will be noted from the schedule that each course in the junior year is prescribed with the idea that every teacher of manual training should have some familiarity with the entire scope of work usually offered in schools. In order to give this breadth, it is of course necessary that each course be short. To overcome this difficulty in the senior year students are required to elect in many places such work as may have the stronger interest, and enable them to begin a line of specialization.

IV

DOMESTIC ECONOMY DEPARTMENT

THE training school for teachers of domestic science and art has during the year 1910-1911 enrolled three hundred and eight students, which culminates a large yearly increase in attendance since the school began its work in 1903. Its remarkable growth has been due to many conditions but undoubtedly the aims governing the organization of its curriculum have been very large factors. A two year course is offered in domestic science and art which adequately prepares a young woman for teaching the subjects in the grades and secondary schools. Such preparation is possible in the time allowed because of careful elimination of subject matter and technical work not pertinent, by careful orderly development of definitely organized subject matter essential to the teachers' training, and by securing a high standard of preparation in school work. The school is the embodiment of the working out of these ideas. As breadth of education and experience are always assets, the school counts itself fortunate in having a large number of college and normal graduates, women of culture and broad experience, among the students enrolled, and the proportion of students of this class is increasing yearly.

While the main aim of the school is to train teachers of domestic science and art, the curriculum is broad enough to fit students for other vocations as well. Its graduates have gone out as dietitians, institutional managers, social workers, into positions requiring lecture and demonstration work for the public, and the training is such as every woman should have to become efficient in home life, in her relations with industries, and in the community. The demand for teachers of domestic science and art is large, including grade and high school positions, supervisors in the grades and high schools, directors of departments in high schools, normals and colleges. The school places graduates in these positions according to their fitness and assists former graduates who have proved their ability for professional advancement.

During the past year many more calls were received for graduates than the number who completed their courses during the year 1909-1910, and many former graduates were advanced to better positions. The school is always ready to be of service to deserving graduates.

The description of courses following the schedule indicates the scope of the work, the subjects of the curriculum being grouped under the heads: professional courses, drawing and design, foods and cookery, science, domestic art, and general courses.

DOMESTIC ECONOMY SCHEDULE

JUNIOR YEAR	Periods
Psychology and Pedagogy	90
Food Study	90
Physiology and Home Nursing	90
English	90
General Chemistry	108
Food Chemistry	108
Junior Cookery	216
Model Sewing	72
Plain Sewing	72
Drawing and Design	108
Mechnical Drawing	72
Physical Training	36
Total	1152

SENIOR YEAR	Periods
Dietetics	72
Organization of Domestic Science and Art	24
Observation and Practice Teaching	
Household Management	90
Bacteriology	108
Chemistry of Nutrition	108
Advanced Cooking	180
Dressmaking	216
Millinery and Art Needlework	144
Textiles	36
Primary Handwork (optional)	72
Interior Decoration and Furnishing (optional)	180
Food Adulteration (optional)	72
Home and Social Economics (optional)	90
Total	1392

During the senior year 1000 periods of prescribed work must be covered and one of the optional subjects taken in addition. The practice teaching and observation is variable in amount and considerable time is required for writing a thesis which should represent some original work on the part of the student.

V

HOMEMAKERS DEPARTMENT

A HOMEMAKERS department is organized to furnish instruction and training in those things a woman needs to know and do in organizing and administering the activities in the home for which woman, as the homemaker, is responsible. This school does not give the professional instruction and training which form so important a part of the work in the school for teachers of domestic science and art. It aims to prepare the young woman for the responsibilities and duties of the home and not for those of the school. A special bulletin is issued giving detailed information concerning the work of this school.

COURSE OF STUDY

For convenience in arrangement, the subjects are grouped under the following heads:

I. The house
   House sanitation, house decoration and furnishing, house management

II. Food study and preparation
   Chemistry, biology, physiology, dietetics, selection of food materials, care of food materials and foods, preparation of food, serving

III. Clothing and household fabrics
   Selection, cost, making and care of clothing; selection, making, and care of fabrics used for decorations and furnishings

IV. The care of children
   Child nutrition, hygiene of childhood, infant diseases and emergencies, children's clothing, child psychology, children's literature

V. Home nursing and emergencies
   Simple household remedies, care of sick room, care of bed and patient, use of antiseptics, disinfectants, and deodorants, care for accidents

VI. Home and social economics
   Woman's industrial relations, the servant problem, woman's social relations, the spending of money

VII. English
   Oral and written expression, exercises in composition, business correspondence, parliamentary practice

VIII. Literature
   A systematic course of reading

IX. Drawing
   Freehand drawing and design, mechanical drawing

X. Physical training
   Regular class work in the gymnasium and natatorium

VI

TRADES DEPARTMENT

THIS school is organized to meet the demand for men in the trades who possess the necessary technical knowledge, and skill in applying that knowledge through modern methods in construction work. Young men are able to secure this theoretical and practical training under competent instructors in much less time than under the apprenticeship system. Even when the apprenticeship conditions are most favorable, but little knowledge of the fundamental principles underlying the correct trade processes are ever acquired by the apprentice. With the instruction and practical training given in this school, its graduates are able to command good wages at once, and to become skilled workmen within a short time after completing their course of instruction in the school. It is not claimed that the completion of either of the courses in the school will entirely take the place of practical experience in the trade, so necessary for the skilled mechanic, but that these courses of instruction, when mastered, materially shorten the time required for a full mastery of the trade, and give a much better knowledge of the principles which determine the best trade processes and practice than can be obtained in any other way.

The kind of training which this school gives not only fits men to follow directions intelligently and skillfully, but to plan and lay out work, to estimate materials and cost, and to give directions to others,—important matters for those who would become foremen, superintendents, or contractors. The demand for skilled men in these two trades is steadily increasing and insures ready employment at good wages for those who complete either of the courses, and rapid advancement when the school training has been supplemented by a reasonable amount of experience.

The work in each department is designed to meet the needs of the man who has already done some work in the trade as a workman, but who wants to strengthen and broaden his preparation through systematic instruction and training adapted to his special needs. It is also designed to meet the needs of the man who has no knowledge of the trade processes or of the principles underlying them and who wishes to take the necessary steps to become a skilled workman with capacity for leadership, in the shortest possible time.

The following outlines are given to indicate the scope of work offered in both the Plumbing Trade School and the Bricklaying Trade School. Exercises involving the different operations are given first, and these are followed by practical applications as parts of new buildings or pieces of new equipment.

A special circular giving details of the trade school courses is issued, and will be sent upon application.

PLUMBING TRADE SCHOOL COURSES

I. The cutting and threading of iron pipes
II. The use of unions, right and left elbows, and couplings
III. The running of soil pipe lines with vertical and horizontal joints
IV. The making of caulked joints as used by plumbers
V. Care and use of plumber's gasoline furnace
VI. Wiping a typical joint
VII. Use and care of the soldering iron
VIII. The making of casts and overcast joints and running seams
IX. Setting up and installing fixtures
X. Arithmetic applied to the problems of practical plumbing
XI. Mechanical drawing of piping layouts and setting up of fixtures

BRICKLAYING TRADE SCHOOL COURSES

I. Mixing and spreading of mortar
II. Laying of brick wall with cross joints
III. Study of bonding and building of nine inch walls
IV. Use of Flemish, English, and Dutch bond in thick walls
V. Building of chimneys,—detached and in party walls
VI. Making of forms for arches and building arches
VII. Construction of walls with various openings
VIII. Setting window and door frames
IX. Fire place work,—mantel construction and flue arrangement
X. Panel and cornice work and decorative bricklaying
XI. Building of circular and octagonal columns
XII. Interior and exterior paving and tile setting
XIII. Arithmetic applied to bricklaying and cement work
XIV. Mechanical drawing for bricklayers

VII

PROFESSIONAL WORK

WHILE certain courses in the Manual Training and Domestic Economy departments are grouped as professional, it is not to be understood that the courses in other groups are entirely non-professional. On the other hand, the applications of the principles and practices of the shops, studios, and laboratories to public school conditions are constantly pointed out in all the courses given to those preparing to teach. Although high technical standards are required in each course, students are made to feel constantly that they are preparing to teach, and their attention is directed to the requirements of the class room. Certain subjects, however, are more distinctly professional, being given to bring together such information and develop such ideals as shall affect all of the work of the student.

These courses include: psychology and pedagogy, observation and practice teaching, organization of manual training, organization of domestic science, history of manual training, literature of manual training, planning of manual training courses, manual training equipment.

PSYCHOLOGY AND PEDAGOGY

This work is taken at the beginning of the junior year and is limited to a consideration of principles, fundamental in character, and to the application of these principles in the actual work of teaching. Time does not permit the study of psychology as a culture subject. The students who have so studied it, but have not given consideration to the application of its fundamental principles in teaching, will need to take the prescribed course.

OBSERVATION OF PRACTICE TEACHING

During the senior year students are required to systematically observe the work of experienced teachers in conducting classes in their respective lines of work in the public schools. The observation work is under the direction of members of the training school faculty. The observation required is not simply a "looking on;" the teachers in charge direct the attention of the observers to definite aims, methods, and results.

ORGANIZATION OF MANUAL TRAINING

By means of lectures, discussions, essays, and written reports, the problems of organizing, teaching, and supervising manual training are brought out, and through making outlines, schedules, and tables ,the work is systematized for practical use. A brief consideration of educational doctrine is taken as a foundation for a study of specific aims of manual training. The selection of problems, which shall contain proper disciplinary value and at the same time give a fund of usable knowledge is made a feature of the course. The relation between the industrial and art crafts and the methods of handling them in schools are pointed out, and suggestions are given for adapting courses to a given community.

ORGANIZATION OF DOMESTIC ART AND SCIENCE

The purpose of this course is to work out the relation to the curriculum of the subjects of instruction included in domestic art and science, to plan courses of study and determine phases of emphasis and methods of procedure in schools of different types. It includes a brief review of the development of domestic science and art in schools and the practical and educational purposes in their teaching, the scope of the subjects, a study of organization of classes, equipment, cost of maintenance, and the business management incidental to conducting such classes in schools. The course is intended to gather and organize the results of professional study in each special subject, to give the student an adequate conception of the problems characteristic of domestic science and art as taught in the schools and to suggest a broad outlook in the field of teaching,

HISTORY OF MANUAL TRAINING

The aims of this course are: (a) To trace the adjustments of the schools to changing social needs, (b) to follow the growth of the manual training movement, (c) to get a broad view of education and of manual training, (d) to establish a basis for an understanding of the present educational and industrial needs, (e) to study the present social, industrial, and economic conditions in order to determine what forms of industrial education are required.

LITERATURE OF MANUAL TRAINING

Oral and written reviews are required of books containing matter pertaining to the industrial aspect of education, books dealing directly with manual training, magazine articles relating to public school handwork, and published reports of associations. Magazines of education, magazines dealing especially with manual training, art and technical matters, and school publications are reviewed. Educational reports reviewed include: reports of association meetings, state educational reports, federal department reports, reports of commissions, reports from foreign countries.

PLANNING OF MANUAL TRAINING COURSES

By means of a study of manual training exercises, sequences, and general practices as indicated in school catalogs and circulars, and after becoming familiar with the recent history of manual training and its diverse aims in different localities a course of study is planned for public schools involving a variety of materials and processes, and yet with a continuous aim and carefully graded steps. The practicability as to teaching in public school classes is made an important element in determining the value of any educational scheme of hand work, suggested by members of the class.

SHOP EQUIPMENT

The aim is to enable students to solve some of the problems that must be considered in planning, equipping, and maintaining a manual training room or building in an efficient and economical manner under any special set of conditions. The course includes: lectures, required reading, class discussions, and the making of plans and drawings of buildings, rooms and fittings, and the working out of specifications and costs of tools, supplies, and general equipment.

VIII

DRAWING COURSES

SOUT INSTITUTE is provided with suitable rooms for mechanical drawing and for free hand drawing and design. Special effort has been made to obtain the best possible conditions of lighting and the rooms are furnished with suitable tables and cabinets.

The mechanical drawing room 27X56 feet is lighted from the north and west by means of 12 large windows with transom windows above. The room is provided with 26 individual drafting tables with drawers for instruments and cupboards for boards, and 6 long tables capable of accommodating 4 students each. A room is arranged upon the upper floor for blue printing with a large revolving printing frame and track, and several smaller frames. The dark room adjoins this with running water and trays and blue print cabinets.

The design room, the same size as the drafting room, contains 24 Washburn adjustable drawing tables, with other tables and desks so that 50 students may be accommodated at a time. In connection with the art studio, a museum is arranged to illustrate the application of design to many lines of work.

ELEMENTARY MECHANICAL DRAWING

A course of drawing is given that enables students to acquire: (a) ability to do upper and lower case lettering; (b) knowledge of mechanical conventions and methods in drafting room practice; (c) acquaintance with elementary geometrical constructions; (d) proficiency in use of instruments; (e) ability to make working drawings of shop models. In lettering, emphasis is placed on uniformity of slope, spacing, alignment, width and shape of letters, and weight of line. Practice sheets and geometric constructions bring in the use of instruments and give drill in conventions. In making working drawings, the pencil drawing is made the finished product. A high degree of technique is sought for in the entire course.

PROJECTION DRAWING

The aim of the work is to make the student familiar with the planes of projection, and their use. Drawings are made of solids in different positions, giving the student the power to visualize, a power most important in all drawing. The work includes the principles of projection applied to making drawings of objects, plane sections and developments, intersections of surfaces, isometric and cabinet projection.

ELEMENTS OF MACHINE DRAWING

Machine drawing is offered to acquaint the student with the actual problems of a drafting shop as far as this can be done in schools. Drawings are made of special pieces of machinery with the supposition that the drawings are to be put into the hands of the patternmaker or machinist. They

must be complete in every detail, containing such knowledge as is necessary to construct the machine part. Work is given in reading machine drawings, a process necessary to every pattermaker and machinist. The course includes: study of conventions, sketching, assembled and detail drawing, visualizing through drawing machine parts, and drawing from standardized proportions.

ARCHITECTURAL AND MACHINE DRAWING

The aim of the work in architectural drawing is to acquaint the student with the fundamentals of frame building construction. It includes work in conventions of details, plans, elevations, perspective of rooms, framing plans, detail plans, and plumbing layouts. In the work in machine drawing, problems in belting, gearing, and cams are solved and the drawing is the product of working out the problem. The subject is made as practical as possible by taking actual conditions and working out standardized proportions for arms, hubs, and rims. Special pieces of machinery such as the gasoline or steam engine are made features of this work.

DOMESTIC SCIENCE MECHANICAL DRAWING

Students are given a training in the making of working drawings of parts of school equipment, and in simple house planning with suggested schemes as a basis for interior decoration. Instruction is given in the proper use of drafting conventions necessary for this work, and in the application of the principles of projection and of linear perspective to the making of pencil drawings. The course is carried on with the use of pencil and scale only.

MECHANICAL DRAWING FOR PLUMBERS

The work in this field covers the necessary elementary work, involving the proper use of instruments, correct drawing of lines, and lettering, as preparatory to the practical work of reading and making plans and elevations of plumbing. Exercises are given in installing work for which many of these plans have been made by students.

MECHANICAL DRAWING FOR BRICKLAYERS

A mechanical drawing course is given to students of the bricklaying school which will enable them to read readily the ordinary building plans and elevations and to make plans for arches, fireplaces and other details of bricklaying.

FREEHAND DRAWING

Practice is given in free hand perspective and the representation of simple objects as a preparation for making pencil and blackboard sketches of class projects. Attention is given to the development of a good technique, and students are directed to study examples of good drawing. Domestic art students are also given work in water color.

MANUAL TRAINING DESIGN

Typical problems for manual training classes are worked out in different mediums. Thought is directed constantly to the application of principles of design to constructions and to the necessity for considering the adaptability

of the construction to public school classes. The course consists partly of a study of methods of construction of typical projects, partly in refinement of proportions, and partly in the application of ornament. Full sequences of models for courses of study in the different materials are planned by senior students for assigned grades.

DOMESTIC ART DESIGN

These courses in drawing and design provide not only for the personal culture which is afforded by the understanding of beauty, a knowledge of art and the ability to do original work, but they also look carefully to the relating of these things to the practical requirements of the domestic art teacher in the various lines of artistic hand work under her direction.

Sufficient work in free hand drawing is required to enable students to sketch readily objects desired for all illustrative or professional purposes.

The elements and the underlying principles of all design are taught with special applications to the particular kinds of design actually carried out in the class problems. Color and color harmonies are made vital things in the selection and combination of materials used as well as in the mixing and applying of paint.

INTERIOR DECORATION AND FURNISHING

The purpose of this course is two-fold,—to prepare students to create an artistic home environment, and out of their knowledge of the basis of art and good design as applied to interiors, to evolve a course of study that can be successfully carried out in public schools under present conditions and find direct application in the homes of the pupils.

IX

METAL WORKING

THE school is prepared to teach the lines of metal work usually found in public schools, especially in the larger manual training high schools. The aim is to present fundamental processes, either as exercises, or where feasible in pieces of finished work, involving the desired processes. During the regular session, emphasis is placed upon shop work which centers around the machine trades, and includes forging, foundry work, and machine shop practice. During the summer session, instruction is given also in hammered copper work, silver work and jewelry, and art smithing. As a part of the preparation for teaching in elementary grades, courses are given in bent iron work and in the elements of tinsmithing.

The blacksmith shop 41X59 feet with an abundance of light along two sides, contains 22 Buffalo down draft forges with power blast and exhaust from electric fans, one brick forge with hand blower, one Champion hand blower forge, one Buffalo hand blower forge No. 660, one Williams White & Co. 40 lbs. power hammer, one Ferracute punch press P 3, one sensitive drill, one Buffalo wall drill, swage block and stand, Buffalo shear No. 3, double wheel emery grinder 14"; full equipment of anvils, hammers, tongs, fullers, flatters, swages, punches, and small anvil tools; bench and vise equipment extending along one side of shop.

The foundry work occupies two rooms adjoining the blacksmith and machine shops,—a molding room 27X30 feet and a cupola room 15X29 feet, containing also provisions for core making. The foundry equipment includes the following: one swinging crane of 2000 lbs. capacity, 8 frames for bench molding, 1 Osborn molding machine, benches for core making, core oven, brass furnace, one 18 inch Collian cupola with cast iron charging platform, storage platform for patterns filled with a large assortment of patterns, 24 two and three part snap flasks and a good variety of iron and wooden flasks, molding boards, and rammers, a complete set of small molders' tools.

The machine shop 31X59 feet with light along two sides is equipped with 12 engine lathes as follows:—six Le Blond 12", two Hendey and Norton 14", one Lodge and Shipley 14", one Putnam 13", one Le Blond 16", one Davis and Egan 26"; besides 2 speed lathes 10". There are other machine tools as follows: one Bickford radial drill 36", one Davis and Egan sensitive drill, one Gray planer 30"X30", 6'; one Flather shaper 16", one Cincinnati milling machine No. 1, one ditto No. 2, one Cincinnati cutter grinder No. 1, one Safety Emery Wheel Co. wet tool grinder No. 2 1-2, one Leland and Falconer and one Hisey Wolf center grinder, one Yankee twist drill grinder, one emery wheel stand, one Burr cold saw and one Barnes arbor press. The drills, reamers, mandrels, and cutters, and general small tools are kept in a tool cage. Special equipment for the machine tools is kept in cabinets near the tools. The machine shop is driven entirely by electric motors from current generated at the school.

The hammered metal equipment for work in silver, copper, and brass contains long benches with a large assortment of stakes and hammers, with

the necessary foot bellows, blow pipes, bench drill, anvils, and vises; snips, files, gravers, chasing tools, mallets, and small tools.

Equipment is added as needed to keep each shop up to an adequate standard of efficiency, and the courses are adjusted as seems necessary from time to time to meet the changing demands, but always with a view to the substantial and more permanent. All of the shops are well lighted, heated and ventilated. An important feature of the courses in metal work is the attention which is given to proper care of equipment, with suggestions for proper provision for this care in public schools.

MACHINE SHOP PRACTICE

The gaining of a direct and systematic method of attacking the problems of the machinist is the object of the course in bench and machine tool work. Fundamental operations of the modern machine shop are covered through the making of a number of pieces of work involving the typical use of a number of tools. The course consists largely of exercises which are of no value as finished pieces, but which teach in the quickest possible time the more important processes in machine shop practice. Lectures, demonstrations, and discussions of topics related to machine shop practice make up the theoretical side of the course.

FORGING

Appliances are described and their operation explained before beginning work at the forge. The uses and care of tools and materials used in forge work are considered in class talks. The necessary processes of working iron and steel are taught together with their applications in practical work. The basic operations of forge practice are taught through the making of a number of exercise pieces and finished articles. After each principal exercise opportunity is given for practice upon a problem which involves an application of the exercise.

FOUNDRY PRACTICE

Patterns finished in the wood shops are taken to the molding room and students are given acquaintance with molding processes and the management of a foundry, core making and the use of cores, the mixing of irons and the handling of a cupola. A part of the molding is done before taking up pattern making, in order that the patterns may be made with a clear understanding of their use and mistakes avoided. The main part of the course follows the pattern making and tests the correctness of the patterns, demonstrating the necessity for carefully considering draft, shrinkage, machining, and coring in the making of patterns.

ART METAL WORK

Courses in hammered copper work, silver work and jewelry, and art smithing are given only during the summer session, from July thirty-first to September first, nineteen eleven. See Stout Institute Bulletin for December 1910 for details of these courses.

BENT IRON WORK AND TINSMITHING

In connection with the weaving and basketry for elementary grades and the course in special shop work, instruction is given in bent iron work and in elementary tinsmithing.

X

WOODWORKING

UNUSUAL facilities are afforded for instruction in various forms of woodworking, suited to elementary grades and to high school classes. While insistence is made upon correct handling of materials and tools, and a high degree of execution, it is constantly made evident that students taking the work are preparing to teach, and the professional side is kept to the front. Students are given instruction in the presentation of the work to classes and are required to present typical lessons before their associates. During the senior year, they are required to teach woodworking to the pupils in the public school classes of Menomonie. During the regular session, classes are organized in:—elementary woodwork, joinery, woodturning, cabinet making, and pattern making. During the summer session extra courses are given in furniture making, wood finishing, and wood carving. The school is thoroughly equipped for handling the different lines of woodworking.

A mill room 29x31 feet is furnished with the following pieces of woodworking machinery:—14" circular saw, 42" band saw and resaw, 18" swing saw, 26" surfacer, 16" jointer, double spindle shaper, tenoning machine, mortising machine, knife grinder. The shop is equipped with individual motors and contains a shavings exhaust, keeping the room free from shavings and dust.

A wood turning room 30x46 feet above the mill contains twenty Vandevoort 10" lathes, one Oliver 12" lathe with carriage, one 20" lathe, 36" band saw, boring machine, 44" grindstone, trimmer, and a work bench with four vises. This room is connected with the joinery room and classes in pattern making use the two rooms, handling the lathe work in one room and bench work in the other.

A joinery room 27x55 feet with light along two sides contains 14 large double benches with cabinets, each bench equipped with four vises, and a teacher's bench. In order that students can have an opportunity for testing different vises, the following makes are represented: Toles—front and tail, Oliver—plain and quick acting, Abernathy—cam and roller nut, Wilcox, Massey, Sheldon, and Harriman. Besides these there are 15 continuous screw vises made at Stout Institute. Connected with the joinery room is a demonstration room containing raised seats, a demonstration bench, a Reed lathe, and exhibition material. Next to the demonstration room is a large tool room.

An elementary bench room the same size as the joinery room is equipped with 29 Grand Rapids Hand Screw Company benches No. 42 with Oliver plain screw front vises and no tail vises. Three large panels are provided along one side for general tools and drawers at each bench are used for individual tools. A large store room is connected for keeping stock, tools, and finished work.

In an adjoining public school building another shop is given over to woodwork. It was entirely equipped by the students. Floors were laid,

benches and vises made, and racks and cabinets built by public school classes and students of Stout Institute.

ELEMENTARY WOODWORK

Work for the grades below the sixth is planned to prepare the student for the conditions under which the work is usually taught. The only tools used are the block plane, hack saw, coping saw, chisel, bit, knife, carving punch, file, try square, rule, and pencil. The principles are taught and the exercises performed in such a manner as to directly lead to the more difficult bench work.

UPPER GRADE WOODWORK

Work for the upper grades is planned for a room with a rather full equipment of woodworking benches and tools. The serious bench work begins in the sixth grade, each problem introducing one or more new exercises or involving added difficulty, the whole course being arranged in a sequenced order of steps. The handling of woodwork classes in public schools is the central thought of the course.

JOINERY

Joinery is planned for the first year's work in high schools, and is arranged according to difficulty of tool operations. A series of joints important to the carpenter and cabinet maker is made and applications are pointed out. The work in the cabinet making course, which follows this course, brings many of the joints into use in constructions. A part of the joints are sawed to a fit and a part of them are chiseled. Each student in this course is expected to develop an ability to saw a joint accurately and to plane and chisel to fine dimensions and close fits.

WOOD TURNING

Wood turning is given for second year high school classes although it may be introduced into the first year if there is a desire to push the work down from the upper years. The course covers exercises planned to give familiarity with both turners' and pattern makers' work and introduces power machinery. Attention is given to correct position of the body, manner of holding the tools, correct use of tools, methods of sharpening, dangers to avoid.

CABINET MAKING

Instruction is given in the application of joinery to the making of furniture, tool chests, cabinets of different kinds, and general interior finish by means of bench and mill work and discussions of the problems of the cabinet maker. Instruction is given in the proper handling of a cabinet maker's equipment of bench tools, in the care and use of the swing saw, circular saw, band saw, jointer and surfacer, and the special tools in the mill equipment at the Institute. Suggestions are given for carrying the work on in schools where woodworking machinery is not available.

PATTERN MAKING

Pattern making is taught in connection with Foundry Practice. Patterns are made in the wood shop and molded in the foundry. Castings

are finished in the machine shop. The aim of the course in pattern making is to give an acquaintance with tool processes and methods of construction, shop kinks, and considerations necessary to successful molding. The rules for draft and shrinkage, and methods preventing irregular crystalization of cast metal are explained and applied, and the importance of constantly considering the molding process and the finishing in machine shop are impressed upon students. The method of applying and the reason for using different kinds and colors of varnish are explained. Part of the course is devoted to the construction of patterns for new apparatus, new tools, and repair jobs around the school to give a touch of that feeling of independence as designer and mechanic in this line of work.

WOOD CARVING AND WOOD FINISHING

These subjects are handled in the summer session as independent lines of work. See Stout Institute Bulletin, December 1910, for details of these courses.

ELEMENTARY CARPENTRY

As a part of the course called Special Shop Work, instruction is given in the elements of building construction as adapted to pupils of the grammar grades. See General Courses.

XI

FOODS AND COOKERY

STUDIES in this group deal with nutritive and economic values of foods and the methods of preparing them for use. To this end a knowledge of the requirements of the body, of processes of digestion, of the structure, composition, digestibility, absorption, availability, market appearance and price are necessary. The system of production of food is considered in so far as it affects the cost and nutritive value of food when it reaches the consumer. Cookery involves the study of the effect of heat variously applied, upon the food principles, of adapting method of cookery to the material in hand to secure the highest return in digestibility and food value with reasonable expenditure of time and labor.

The courses in cookery aim also to develop in each student a high order of technical ability and high standards of order and cleanliness in work. The subject matter is well organized and presented logically, and the practical lessons are presented in sequences according to the orderly development of the subject matter involved, the degree of skill in manipulation required, the availability of food materials and the probable application of the lessons to teaching.

The subjects of the junior year in this group, i. e.; food study and cooking, are prerequisite to the cooking and dietetics of the senior year. Credit in these courses is allowed for courses taken in other schools when those courses prove on examination to be the full equivalent in subject matter and technical work of the courses given here and are planned with similar phases of emphasis, particularly emphasis on the professional phase.

The professional phases of these courses are presented as an intregral part of the work. The sequence of subject matter and practical work, methods of presentation of the subject to classes, ideals, plans and devices in class management are studied, discussion, criticism, and comparison of concrete examples taken from the class work in the training school classes. The modification of a course to meet the needs of different schools, to meet the needs of pupils from various types of home environment, is considered, the many ideas involved to be later summarized and organized in the course Organization of Domestic Art and Science.

The school is admirably equipped with class rooms and laboratories, the latter being sanitary, convenient, complete in every way and designed to secure the best working condition for both student and teacher. As the laboratories are not uniform in plan the student has an opportunity to study at first hand different types of furnishing and equipment suitable for the school laboratory.

FOOD STUDY

A complete and systematized study of all foods to show composition, structure, nutritive ratio, digestibility, cost, and place in the diet. It includes a study of the chemical and physical changes which take place in foods during cooking, and the effect of various temperatures on the digestibility and food

value of the various foods. Work in food study is closely correlated with the work in junior cooking so that one complements the other.

JUNIOR COOKERY

Elementary cooking is especially designed to meet the needs of those planning to become teachers of domestic science. The student is trained, therefore, not only to obtain good results in housekeeping and cookery, but also to think and work with a view to presenting the subject matter to others. Foods are studied and tested to learn the effect of heat and moisture upon them, and the principles of cookery thus determined are applied in the preparation of simple foods and combinations of foods. It is planned to secure a thorough understanding of the theory and method involved in the cooking of the more fundamental foods, rather than to cover the whole field of cookery. Sufficient repetition of processes is given to insure a fair degree of skill in the manipulation of utensils and materials. Attention is given to the systematic organization of the school kitchen and its management. The cost of foods is studied in relation to the income of the home and of the school, and the cost of the lessons is worked out to serve as a basis for comparison. Invalid cookery is given at the end of the course as an application of principles previously given.

ADVANCED COOKERY

This course gives practice in several phases of cookery, in selection and marketing of foods, making menus and serving meals. Especial attention is paid to the economic consideration of wise expenditure of time and money in food preparation. The processes carried out are more elaborate than in the junior year and self-reliance on the part of the student in the plan and execution of her work is encouraged.

The work includes food preservation, food preparation, study of the menu, of table service, individual work in the serving of meals, large quantity cooking and serving, the giving of demonstrations. Prerequisite—Junior Cookery.

DIETETICS

The purpose of this course is to present the fundamental principles of human nutrition and their application to the feeding of individuals, families, and larger groups under varing physiological, economic, and social conditions. The course aims to relate and apply the principles given in the study of foods and their preparation, physiology, and physiological chemistry. It includes recitation and laboratory work and is designed to be used as a basis for practical work in dietetics as well as for organizing and teaching the subject in the high school. Prerequisite—Junior Cookery: parallel, Chemistry of Nutrition.

XII

SCIENCE GROUP

COURSES offered in applied science are general chemistry, food chemistry, chemistry of nutrition, food adulteration, and bacteriology. In each course the object is to correlate the work as closely as possible with the regular domestic science work. Topics, reactions and phases which are directly applicable to household problems are especially emphasized.

The chemistry courses offered are progressive and could be grouped under the heading of household chemistry. In general chemistry the composition and changes of matter are studied as well as some of its fundamental laws. In addition a study is made of the elements which are essential constituents of living matter and the more important inorganic compounds such as water, acids, bases, and salts. Some of the practical applications are the effect of hard water on soap, the use of washing powders, the interaction between bases and acids as illustrated in the use of baking powders and soda, the interaction between metals and acids as shown by the action of the acid contents of tins, the effect of pressure on boiling point and modification of recipes for high altitudes, the effect of bleached cloth and vegetables on silverware, the use of salt in freezing mixtures and the rusting of iron ware. Food chemistry deals with the composition of foods and the changes which they undergo in cooking, fermentation, and putrefaction. The chemical reactions involved in the cooking and preservation of foods are dwelt upon. Chemistry of nutrition deals with the food stuffs from the time they enter the digestive tract until they are built up into living tissue, or used as fuel for the production of heat, or until they are eliminated from the body. The course includes the chemistry and physiology of digestion, absorption, metabolism, excretion and oxidation.

Food adulteration involves a study of different market brands of canned products, as well as cereals, spices, teas, coffees, cocoas, vinegars, catsups, honey, syrups, baking powders, flours, dried fruits, lards, and dairy products. The student learns to recognize the pure article and is able, by simple tests, to detect the presence of the ordinary adulterants. She learns enough about brands, labels and values to prevent her buying adulterated goods.

The work in bacteriology is distinctly applicable as a household science. The course is correlated with that of home nursing, home and municipal sanitation, and household management. Emphasis is laid on the bacteriological principles involved in canning and preserving foods, in disinfecting and sterilizing. Bacteria, yeasts, and molds are studied both in the laboratory and in class.

General and food chemistry are offered in the junior year, chemistry of nutrition and bacteriology in the senior year. Food adulteration is an elective course open to the students who have completed food chemistry.

Well equipped laboratories are maintained for all the science work. The bacteriological laboratory is supplied with autoclav, hot air and steam sterilizers, incubator, and all the apparatus necessary for the cultivation and technical study of micro-organisms. The highest grade microscopes are provided. There are two chemical laboratories, each with desk space and equipment for fifty pupils. All the laboratories are well lighted and ventilated.

General chemistry is prerequisite for food chemistry, and food chemistry for chemistry of nutrition. Students are not admitted to work in bateriology until they have completed the junior science work. With the exception of food adulteration, students are recommended to take not more than one science course a semester as the laboratory and class room work for each course require a maximum of time.

GENERAL CHEMISTRY

In this course the aim is to teach the fundamental facts and theories of general chemistry in connection with subjects which are essential for an understanding of food and household chemistry. Emphasis is placed on principles and reactions relating to processes involved in cookery, digestion, food preservation, cleaning, laundering, lighting, heating, plumbing and ventilation. The course includes a study of matter, measurement of gases, study of oxygen, study of hydrogen, water, atomic theory and fundamental laws of matter, chlorine, hydrochloric acid, molecular composition, atomic and molecular weights, use of symbols and formulas, chemical equations, sodium and potassium and their compounds, solutions—characteristics, electrolytic theory and its application—sulphur and compounds, atmosphere, nitrogen and nitrogen compounds, the halogens, carbon, oxides of carbon, silicon and boron, calcium and calcium compounds, periodic law.

FOOD CHEMISTRY

Food chemistry is designed to give a comprehensive knowledge of the composition of foods and the chemical changes involved in cooking, breadmaking, fermentation, putrefaction, and digestion. The course involves a study of organic chemistry with special study of the organic food stuffs. The course includes a study of hydrocarbons, hydrocarbon derivatives, carbohydrates, glucosides, amides, alkaloids, proteins, enzymes or ferments, ptomaines, leavening agents, artificial sweeteners, artificial flavorings, coloring matter, preservatives, condiments. Prerequisite—General Chemistry.

CHEMISTRY OF NUTRITION

The aim is to study such phases of physiological chemistry as are essential for an understanding of the composition of the body tissues and fluids, and of the processes of the digestion, absoption and metabolism of foods. The course covers the study of chemistry of the cell, food stuffs required by cell, digestion of foods, absorption of foods, function of liver, function of spleen, metabolism, end products of metabolism, intermediate stages in metabolism, abnormal metabolism, energy, chemistry of tissues. Prerequisites,—Inorganic Chemistry and Food Chemistry.

BACTERIOLOGY

The purpose of the course is to show the influence of micro-organisms, such as bacteria, yeasts, and molds, upon food materials and the human organism, and to emphasize the bacteriological principles involved in the care and preservation of foods, household sanitation, home nursing, and the prevention of infectious diseases. The course includes the study of

the nature and relations of an organism, composition of living cell, structure of cell, nutritive metabolism, respiration, fermentation and digestion, growth, reproduction, plant classification, bacteria, work of bacteria, bacteria in relation to disease, food preservation, yeasts, molds, rusts, smut, ergot, mushrooms. Prerequisite—General Chemistry.

FOOD ADULTERATION

In food adulteration a study is made of the classes of foods which are most likely to be adulterated, the chief adulterants used, and chemical and physical tests which serve for the detection of sophisticated foods. Analyses are made of different market brands and a knowledge is gained of their composition and purity. Whenever possible household tests are given as these are the tests the student could employ in the home or school kitchen.

XIII

DOMESTIC ART

THE courses grouped under domestic art include the subject matter and technical work involved in the knowledge and use of textiles for clothing. They present systematic courses of instruction, the problems in each arranged in sequence according to degree of skill required and the subject matter closely related to the work in hand. The aim is to develop technical skill on the part of the student and to give the basis for rational judgment of values in buying, of suitability and durability of material for a given purpose in clothing, to develop good taste in form, line, color, and color combination in clothing, and to teach care and cleansing of materials based on a knowledge of textiles. The courses are planned to give subject matter and concrete problems from which similar courses in the grades and secondary schools may be organized, the possibilities of the subjects, and their adaptation to meet varying conditions in schools. Methods of presentation and class management are studied in the respective classes.

In the making of an article of clothing, neatness, accuracy, good judgment, economy of material and time, care of materials and equipment, consideration of the rights of co-workers, are emphasized. To arrive at a sense of values, the cost of materials and labor is calculated and a comparison is made of machine made and hand made garments.

The requisite equipment is provided for this work, five rooms being occupied by the domestic art classes, two rooms and a fitting room in the second floor of the building used for classes in dressmaking, and two large rooms in the third floor for model and plain sewing and millinery. Laboratory work in textiles is given in one of the science laboratories.

MODEL SEWING

The purpose of the course is to develop skill, neatness, and accuracy in the work, to give a thorough understanding of the simple exercises and general operations in sewing, and to provide a course of instruction that, in general character and method of presentation may be suggestive of the work to be carried on in public school classes. It includes a course in the making of models involving the various steps in sewing to be preserved as illustrative material in teaching. Applications of the models are made upon articles of use and simple garments. The problems include canvas work, hems and hemming, ruffles and bands, darning, patching, hemstitching, drawn work, flannel work, buttonholes, sewing on buttons, and trimming for white work.

PLAIN SEWING

The course aims to give the student a knowledge of a variety of ways in making and finishing garments in plain sewing. It also gives ideas of the best methods of presenting the subject matter in public school classes. The practical work consists of the making of a four-piece set of undergarments and any other simple garments for which there may be time. The garments are standard size, drafted to measure, and show in their finishing an application of the steps taught in model sewing.

DRESSMAKING

The purpose here is to teach the art of dressmaking—the use of a system of drafting by which patterns and designs are made; the designing of ordinary garments; the use of line, proportion, color and adaptation of materials; the development of neatness, accuracy, self reliance, originality, and high standards of work. The effort is made to present such subject matter as will meet the needs of the teacher of dressmaking, and to indicate the plan and method of adapting the work to classes in the grades and in secondary schools. The practical work includes the making of a tailored shirtwaist, wool skirt, and thin dress.

ART NEEDLEWORK

Art needlework is planned: (a) To develop taste, skill, neatness, and accuracy in work; (b) to give training in the application of a knowledge of design and skill in fine needlework to the finishing or decoration of articles of use, either clothing or house furnishings; (c) to show the arrangement and development of the subject, its training value, its use in the grade and high school courses of study and manner of presentation. That the purposes may be realized, it is necessary to relate the work to the work in design, showing the essentials of a good design and the essentials in good art needlework design. The different lines of art needlework are considered as to their characteristics, adaption of design to work in hand, articles suited to kind of finishing or decoration, materials to be selected.

MILLINERY

In the treatment of fall and spring millinery, an opportunity is given to develop skill in the handling of materials and taste in their selection and combination, as well as to teach the art of designing, making and trimming hats. The practical work consists of wire work, tinting and renovating materials, bow making, millinery stitches, plaitings, folds, making of buckram frame, making of street hat and of lingerie hat. The professional side is emphasized by the discussion of school problems, equipment, materials, sources and prices of supplies.

XIV

GENERAL COURSES

COURSES have been outlined under the main divisions of: (1) Professional work, (2) Drawing, (3) Metal work, (4) Wood work, (5) Foods and cookery, (6) Science, (7) Domestic art. Many courses offered at Stout Institute do not fall naturally into any of these groups, and so must be described separately. Some of these courses belong to the manual training department, some to the domestic science, some to the trade schools, and some to the homemakers school.

Handwork for the lower grades includes courses in clay work, paper and cardboard construction, basketry and weaving, and the course in primary handwork given to the domestic art students.

Under the title—Special Shop Work are included elementary carpentry, simple tinsmithing, and repair work. These branches are all handled in the manual training building.

In a building especially equipped for the work, instruction is given in plumbing and gas fitting, and in bricklaying and cement work. A part of this building was built by students of the bricklaying trade school which occupies the main floor. The plumbing of this as well as of other Institute buildings has been installed by students of the plumbing trade school which occupies the entire second floor. The trade schools furnish instruction for students taking the work as tradesmen, for students in the manual training department, and for Menomonie high school pupils.

Courses in household management, in emergencies and home nursing, and textiles are given to students in the domestic science department and to those in the homemakers school. Courses in the care of children, in home and social economics, and in juvenile literature are given to the homemakers.

English instruction is given to all, and regular theme work is required from those preparing to teach manual training or domestic economy unless advanced work has been done in college or normal school before entrance. Physical training is given to all, and includes both gymnastics and swimming regularly through the course.

PAPER AND CARDBOARD CONSTRUCTION

As a preparation for supervisors of elementary manual training, the place of first importance is given to construction in paper and cardboard. Objects are made which seem to bring in the most typical processes of using these materials, and directions are given for the handling of this work in public schools. The course includes free cutting, the making of card mounts, booklet making, book binding, envelope making, and paper box making.

CLAY WORK

The modeling of type forms and their application to common objects is given as a preparation for modeling from objects, from pose, from photo-

graphs, and from memory images. Relief ornament is designed and modeled and panels made for casting in plaster. The main feature of the course is the making of pottery, which is the only strictly manual training work in clay. The elementary pottery for primary grades is continued in more advanced work in the making and glazing of decorated pieces for upper grades.

WEAVING AND BASKETRY AND BENT IRON WORK

Paper strips are woven to illustrate the making of patterns, and a rug is woven for each of the first four grades, using cotton and woolen yarns and chenille, and working on small wooden looms. Basketry for primary grades consists in making a coiled mat, coiled basket, and rattan baskets of different shapes. The course in bent iron gives pupils of the elementary schools a first acquaintance with the handling of iron as a material of construction, enabling them to learn something of its properties and typical uses. An attempt is made to use the material in both decorative and structural ways, consistent with the nature of the material.

PRIMARY HANDWORK FOR DOMESTIC ART STUDENTS

The course is designed to prepare teachers to take the supervision of the handwork in the primary grades, or to teach it themselves. It is not the following out of any one course of study, but it is designed to be suggestive along many lines for the working out of a course in any type of school. Simple crafts from many industrial fields are chosen in order that the student's interest in things about her may be increased. Attractive and useful articles are presented together with discussions of the materials, and the place and value of the article in the school. The subject matter consists of cardboard construction, cord work, spool knitting, weaving and basketry.

SPECIAL SHOP WORK

Three lines of work are given in this course: (a) elementary carpentry, including,—sawing exercises, the making of some of the more common carpentry joints, and the building of a miniature frame house; (b) elementary tinsmithing, including,—the cutting and bending of sheet tin, and the use of rivets and solder; (c) repair work, including,—setting a window, repairing and refinishing a piece of furniture, sharpening an ax or pair of skates, fitting a key to a lock, and polishing a piece of metal.

BRICKLAYING

Aims of the course in bricklaying are to give a practical and a theoretical knowledge of the elementary principles of the subject, to students who have never had the work. For those who have had the work, special features are added according to the amount of previous work done. The elementary course is such that it may be given to a high school class or to eighth grade pupils in a public school. Lectures are given covering all the work of the course. An emphasis is placed upon the choice of different kinds of bonding, and upon the constant use of such kinks and devices as will aid the bricklayer in his work, The relation of the subject to public and trade school conditions is kept constantly in mind. The courses offered in the Bricklaying Trade school are described in a Special Circular of Information issued by Stout Institute.

CEMENT WORK

A need for instruction in cement work for public schools has developed, and this course attempts to meet it in part. The object of the course is to teach the practical uses of concrete to those who may have to teach it to others. A definite piece of work is finished each day, and the course is such that it may be taught to a normal or public school class. The lectures cover limes and cement, selection of materials, use of concrete, and failures of concretes. The principal features in concrete work are determining the mixture, making the forms, placing in the forms, finish, and careful work.

PLUMBING

Teachers of manual training are given an acquaintance with some of the plumber's problems in order that a better idea may be had of general industrial conditions and better provision made to meet these conditions in manual training courses. Those engaged in teaching or directing the teaching of trades in special schools are given an idea of how the trade instruction is carried on in Menomonie. The work is largely practical shop work. The school is well equipped for practical instruction in plumbing and constant additions are being made to keep equipment of the shop up to date. The courses offered in the Plumbing Trade School are described in a Special Circular of Information.

HOUSEHOLD MANAGEMENT

The purpose of the course is to give a complete consideration of the problems in the administration of the home with reference to house structure, sanitary standards, mechanics, house furnishing, cleansing processes, economics, and social, industrial, and ethical relationships of the home. It involves a study of location, heating, ventilation, and lighting of the house, the water supply and disposal of waste, a study of sanitary and economic furnishing and finishing, of household accounts and division of the income, of the organization of household work and the labor problem involved, and a brief consideration of the social relations of the home.

EMERGENCIES AND HOME NURSING

The course consists of a study of the treatment of simple ailments of the human body, the care of the sick in the home, the handling of emergencies of illness that occur in the home, school room, and elsewhere, with demonstration and practical work in bed making, changing bed clothing with patient in bed, changing gown, making patient comfortable, and in the making and applying of dressings and bandages. Disinfectants and their use, the location, furnishing and care of the sick room, baths and bathing, administration of medicines and foods, special diseases, emergencies, etc., are studied.

CARE OF CHILDREN

A child has a right to the care that will prepare him for his life work, whatever it may be; the difficulty is to assure this care to the average child in the average home. One solution of this difficulty is a definite and systematic course of instruction for young women that will aid them in fitting themselves to discharge the duties that devolve upon those responsible for the care of children.

HOME AND SOCIAL ECONOMICS

Beginning with a consideration of the evolution of the house, the home, the family community, and home functions, and humanizing and civilizing effects of home functions upon the character of men and women, this consideration is followed with the definition of the term, home and social economics, and an explanation of the importance of the study of the same.

TEXTILES

The course in textiles consists of a study of the nature and characteristics of textile fiber, the development of spinning and weaving, the characteristics, values, commercial form, and prices of fabrics, with a view towards giving the purchaser, either for the home or school, a basis for rational judgment of materials as to relative cost, durability and suitability, and as to their care and cleansing. The course is given by lectures and laboratory work, the latter covering the problems of comparison of fabrics, construction of textile charts, tests for fastness of color, for shrinkage, for adulteration, and experiments with cleansing agents.

LITERATURE

A systematic course in reading good literature is carried on through the two years, with the purpose of developing good habits of reading, an appreciation of good literature, a discriminating taste in the choice of reading matter, and a knowledge of literature available for lines of study of special interest to women.

ENGLISH COMPOSITION AND EXPRESSION

Presentation of such phases of composition work as will give the student a command, both in speaking and writing, of simple, correct, and clean-cut English, is the aim of this course. The special topics considered vary with the needs of particular classes, but in general they may be designated as: grammatical forms; sentence structure; choice of words; social and business correspondence; the preparation and organization of literary material; oral expression.

PHYSICAL TRAINING

Regular work in the gymnasium and natatorium is taken throughout the manual training course unless students are excused by the director. Two periods each day are given to exercises, games, swimming, and normal gymnastics, two periods being required of all students. Stout Institute Athletic Association encourages basket ball and base ball and puts out good teams each year.

Students in other departments are offered regular instruction in gymnastics and swimming, but the work is optional in the domestic economy department.

XV

GROWTH OF STOUT INSTITUTE

THE Stout Training Schools for teachers of manual training and domestic economy, and for the kindergarten were inaugurated as a part of the public schools of Menomonie, Wisconsin, in 1903, and Stout Institute was incorporated as an independent organization in 1908. The kindergarten department, which began its work in 1899, was discontinued in 1909. Summer schools have been carried on since 1906. The Homemakers school was started in 1907. Trade schools for plumbers and bricklayers were started in 1908. The following table shows the growth of the Institute during the last eight years.

ENROLLMENTS BY YEARS

Departments	1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11
MANUAL TRAINING	3	15	20	27	41	46	63	73
DOMESTIC ECONOMY	21	36	38	47	65	124	227	308
OTHER DEPARTMENTS	35	31	34	36	40	73	28	27
	59	82	92	110	146	243	318	408
SUMMER SCHOOL			21	48	93	152	197	
Totals	59	82	113	158	239	395	515	

ENROLLMENTS OF SUMMER SESSIONS

The following table indicates the positions held by students of the different summer sessions:

	1906	1907	1908	1909	1910
Superintendents and principals	1	0	1	9	11
Teachers and supervisors of manual training	6	18	34	53	67
Teachers and supervisors of domestic art and science	5	9	14	18	21
Teachers and supervisors of drawing and art work	0	0	2	4	4
Other teachers	2	5	22	37	42
Students	6	9	16	27	44
Others	1	7	4	4	8
Totals	21	48	93	152	197

The following table shows the enrollment by departments during each of the summer sessions:

Number of students in	1906	1907	1908	1909	1910
Manual training courses	15	32	64	96	124
Domestic economy courses	8	19	39	66	87
Art courses	0	0	0	12	19
Less counted twice	2	3	10	22	33
Totals	21	48	93	152	197

Other data of general interest regarding the summer session follows:

	1906	1907	1908	1909	1910	1911
Number of courses offered	17	17	20	37	44	55
Number officers and teachers	6	8	8	16	22	28
Number men enrolled	10	23	43	74	105	
Number women enrolled	11	25	50	78	92	

STATES REPRESENTED

The following table represents the influence of this school as to the number of states which have sent students to Stout Institute and those which have employed its graduates.

States Represented by Students in Regular Sessions	States Represented by Students in Summer Sessions	States in which Graduates have been employed
New York	Maine	New York
Pennsylvania	Massachusetts	New Jersey
Ohio	New York	Pennsylvania
Indiana	New Jersey	Delaware
Kentucky	Virginia	Virginia
Michigan	South Carolina	West Virginia
Illinois	Ohio	North Carolina
Wisconsin	Indiana	South Carolina
Minnesota	Michigan	Georgia
Iowa	Illinois	Ohio
Missouri	Wisconsin	Indiana
Louisiana	Minnesota	Kentucky
North Dakota	Iowa	Tennessee
South Dakota	Missouri	Alabama
Nebraska	Arkansas	Mississippi
Kansas	North Dakota	Michigan
Oklahoma	South Dakota	Illinois
Texas	Nebraska	Wisconsin
Montana	Kansas	Minnesota
Wyoming	Oklahoma	Iowa
Colorado	Texas	Missouri
Idaho	Montana	Arkansas
Utah	Wyoming	Louisiana
Arizona	Colorado	North Dakota
Washington	Utah	South Dakota
Oregon	Arizona	Nebraska
California	Washington	Kansas
Canada	Oregon	Oklahoma
Cuba	California	Texas
	Canada	Montana
		Colorado
		Idaho
		Utah
		Arizona
		Washington
		Oregon
		California
		Porto Rico
27 States, Canada, and Cuba	29 States and Canada	37 States and Porto Rico

This represents in all 40 states, Canada, Cuba, and Porto Rico, which have been represented at Stout Institute by students or graduates.

The present enrollment shows a representation from 23 states and Canada. Graduates are now employed in 35 states and Porto Rico.

XVI

INDEX OF COURSES

	Page
INTRODUCTORY	
Officers and faculty	5
General information	9
Manual training department	13
Domestic economy department	15
Homemakers department	17
Trades department	18
PROFESSIONAL WORK	20
Psychology and pedagogy	20
Observation of practice teaching	20
Organization of manual training	20
Organization of domestic art and science	21
History of manual training	21
Literature of manual training	21
Planning of manual training courses	21
Shop equipment	21
DRAWING COURSES	22
Elementary mechanical drawing	22
Projection drawing	22
Elements of machine drawing	22
Architectural and machine drawing	23
Domestic science mechanical drawing	23
Mechanical drawing for plumbers	23
Mechanical drawing for bricklayers	23
Freehand drawing	23
Manual training design	23
Domestic art design	24
Interior decoration and furnishing	24
METAL WORKING	25
Machine shop practice	26
Forging	26
Foundry practice	26
Art metal work	26
Bent iron work and tinsmithing	26
WOODWORKING	27
Elementary woodwork	28
Upper grade woodwork	28
Joinery	28
Wood turning	28
Cabinet making	28
Pattern making	28
Wood carving and wood finishing	29
Elementary carpentry	29

FOODS AND COOKERY 30
Food study 30
Junior cookery 31
Advanced cookery 31
Dietetics 31
SCIENCE GROUP 32
General Chemistry 33
Food Chemistry 33
Chemistry of nutrition 33
Bacteriology 33
Food adulteration 34
DOMESTIC ART 35
Model sewing 35
Plain sewing 35
Dressmaking 36
Art needlework 36
Millinery 36
GENERAL COURSES 37
Handwork—
Paper and cardboard construction 37
Clay work 37
Weaving and basketry and bent iron work 38
Primary handwork for domestic art students 38
Special shop work 38
Trades—
Bricklaying 38
Cement work 39
Plumbing 39
Domestic Economy—
Household management 39
Emergencies and home nursing 39
Care of children 39
Home and social ecomomics 40
Textiles 40
English—
Literature 40
English composition and expression 40
Physical training 40
GROWTH OF STOUT INSTITUTE 41
Enrollments by years 41
Enrollments of summer sessions 41
States represented 42

CALENDAR FOR 1911-1912

1911

June 9---Eighth Regular Session ends

July 31---Sixth Summer Session begins

September 1---Summer Session ends

September 11---Ninth Regular Session begins

1912

January 26---First Semester ends

January 29---Second Semester begins

June 7---Ninth Regular Session ends

December 19, 1911-January 3, 1912---Holiday vacation

March 22, 1912-April 1, 1912---Spring vacation

Stout Institute

Menomonie
Wisconsin

Circular of Information

Calendar for 1911-1912
General Information
Manual Training Department
Domestic Economy Department
Homemakers Department
Trades Department
Growth of Stout Institute

Issued April 1911

Reprint from Stout Institute Bulletin for March 1911

STOUT INSTITUTE BULLETIN

The Bulletin is issued four times during the year:—March-June-September-December.

It covers the application of the principles of technical and household arts and sciences to public school conditions and indicates how these subjects are being developed in Menomonie.

The subscription price is fifty cents per year. Sample copies will be sent upon request.

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CIRCULARS OF INFORMATION

Circulars of Information are issued from time to time to meet special needs not covered by the quarterly Bulletin. For details of courses suggested in this circular see March 1911 Bulletin. For summer announcement for 1911 see December 1910 Bulletin.

GENERAL INFORMATION

LENGTH OF COURSE

COURSES leading to the diploma granted by each of the training schools for teachers require two years work. No diploma will be issued to any person who has not been a student in residence for at least one year. Upon the completion of one of these courses,—Manual Training or Domestic Economy,—a diploma is issued, which by statute, is made the basis for the issuance of a life certificate, after one year's successful teaching in Wisconsin.

This certificate legally qualifies the holder to teach the subjects in which training has been taken, in the public schools of the state. The certificate is issued by the State Board of Examiners and is accepted in most of the other states.

QUALIFICATIONS FOR ADMISSION

Graduation from a four year's high school course, or equivalent preparation, will be required for admission to each of the training courses. The candidate must be at least eighteen years of age, and must be possessed of good health and physical energy, of refinement and good character. Testimonials of good character are required.

Students who have had Normal School or Collegiate training will be given credit for such of the required work in the Institute courses as they have satisfactorily mastered. Successful experience in teaching before entering the Training School, in most cases, reduces the amount of practice teaching required of the student.

ADVANCE ENROLLMENT

School accomodations limit the number of students who can be enrolled; for this reason persons who wish to enter should make application in advance for an enrollment blank, which should be filled out and forwarded to the school with physician's certificate, and two certificates of good character. Enrollment is made in the order of application.

THE DEMAND FOR GRADUATES

The demand for the graduates of Stout Institute as teachers of manual training and domestic economy is steadily increasing year by year. At the present time they are teaching or doing supervisory work in thirty-five states and in Porto Rico.

The number of schools in which manual training and domestic art and science are being taught is rapidly increasing and the demand for well trained teachers of these subjects is greater than ever before.

The officers of the Institute are glad to recommend teachers to school officials who are seeking competent teachers of manual training and domestic art and science. In making recommendations every effort is made to name candidates who by training, temperament, personality, and experience

are adapted to the demands of the position to be filled. The more complete and definite the information furnished as to the kind and amount of work required, and the salary to be paid, the better they are prepared to select the person most likely to give satisfactory service. They prefer to make no recommendation unless they feel confident that they can name a candidate who will succeed.

THE SUMMER SESSION

Stout Institute Summer Session offers exceptional opportunities for supervisors or special teachers of manual training, domestic art and science, or freehand drawing to advance themselves along their special lines, either in tecnique or along the professional side. Superintendents and principals are finding these summer sessions an opportunity for learning something of the content and method of school handwork. Grade teachers are perfecting themselves in handling special subjects through summer courses.

Provision is made for outings and games so that a vacation may be combined with a summer course of study.

Fifty-five courses are offered in the summer session of 1911. The session begins July 31, and ends September 1. The December number of the bulletin gives full information concerning the courses offered in the summer session.

SCHOOL EXPENSES

Tuition is one hundred dollars per year, one-half payable at the beginning of each semester. A fee of fifteen dollars per year is charged to cover the cost of materials used by the students in the manual training department and ten dollars in the domestic economy department. Students taking work in any courses not required for graduation, are charged an additional fee to cover actual cost of material used in such courses.

Board and room can be obtained at prices ranging from four and a half to six dollars per week in private families.

LABORATORY FEES

In the science courses minimum fees are charged for laboratory work. The fees for the regular course are as follows:

General Chemistry - - -	$5.00
Food Chemistry and Chemistry of Cleaning -	2.50
Biology - - - -	5.00
Physiological Chemistry - -	5.00
Food Adulteration - - -	2.50

In addition to the laboratory fee, students are expected to pay for any breakage which may occur.

LIBRARY AND READING ROOM FEES

A fee of five dollars, payable at the opening of the school year is required of each student.

All necessary text books are furnished from the loan text book library for the school year without any extra charge to students.

The reference library is supplied with standard reference books

needed to supplement the text books in different subjects and with educational and technical periodicals adapted to the needs of the students.

REFUNDS

Students who are compelled to withdraw from the Institute by reason of illness are entitled to a refund of tuition from the date when notice is received of such withdrawal, to the end of the semester.

Students boarding in the dormitories are also entitled to a refund of whatever amount has been advanced for board beyond the date when notice is received of withdrawal. Refund for advance payment for room rent in the dormitories is allowed from the date when the room is again rented, and effort is made to secure an occupant at the earliest date possible. As books and supplies for which fees are charged have to be bought in advance in quantities necessary to supply the entire enrollment no refund of fees is made in any case.

UNIFORMS

Young women attending the Institute are required to wear uniforms during the daily sessions.

A gymnasium suit is required of each student taking physical training. This work is optional for students in the domestic science department.

Special information regarding uniforms and gymnasium suits is sent to prospective students upon application.

DORMITORIES

Bertha Tainter Hall accommodates about thirty young ladies. The Hall is furnished with all modern conveniences, the rooms are electric lighted, and heated both by direct and indirect radiation, thus assuring ample heat and good ventilation. A large reception room, a music room, and a reading and study room for those who may prefer to study there rather than in their rooms, are provided. The hall is three blocks from the school grounds, overlooks Lake Menomin, and is in the midst of spacious, well-kept, well-wooded grounds. It is the aim to make this an ideal home for such students as wish to avail themselves of its accommodations. The home is in charge of a woman of experience and culture, and such regulations and supervision are maintained as insure proper conditions for health, effective work and the proper social life of students.

Tainter Annex accommodates fifty young ladies and is situated on the same grounds with Bertha Tainter Hall. It is thoroughly suited to the purposes for which it was planned. It has a large central living room with two balconies and skylight above, making an attractive place for rest and social activities. The rooms are all arranged in suites of study and sleeping room, each suite for two students. A large dining room in Bertha Tainter Hall provides meals for students in both halls.

The charge for room for the school year for each student is sixty to eighty dollars according to the size and location of room. In most cases the lower rate prevails. The charge for meals and a definite amount of laundry work for each student rooming in the Halls is four dollars and fifty cents per week. The amount of laundry work done under the above

arrangement is the average amount each student requires weekly. A list of the different articles laundered weekly without additional charge is furnished each student. Articles not included in this list are laundered at a reasonable rate at the Institute laundry.

HOMEMAKERS DORMITORIES

Two cottages furnishing home accommodations for sixteen students are provided for the students taking the Homemakers course. The cost for room and board is the same as in the Halls.

SCHOOL YEAR

The school year is thirty-six weeks in length, beginning September 11, 1911, and ending June 7, 1912. Students should arrange to enter at the beginning of the school year if possible. When this is not possible students may enter at the beginning of the second semester.

The summer session is five weeks in length, beginning July 31, 1911, and ending September 1, 1911.

Address all correspondence regarding courses of study or general work of the Institute to

L. D. HARVEY,
President Stout Institute,
Menomonie, Wisconsin.

MANUAL TRAINING DEPARTMENT

A TRAINING school for teachers of manual training was started in 1903 with three students and has had a steady growth year by year to its present enrollment of seventy-three.

1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11
3	15	20	27	41	46	63	73

It has aimed to meet the increasing demand for well trained teachers of mechanical drawing and shop work in public schools. Its aim has been very specific and there is abundant proof that it has realized its aim. The needs of public school pupils are kept constantly in mind and every effort is made to provide for the actual conditions of the class room. A large amount of time is given to the shop work, and the student is required to develop skill in the handling of tools in several different shops. An important feature is the work in observation of classes and in practice teaching, where typical conditions prevail. While emphasis is placed upon a mastery of the things immediately needed in the schools, reasonable time is given to a study of the principles of teaching and the history of the subject.

During the entire course, regular exercise in the gymnasium is required of all manual training students, and considerable attention is given to the problem of teaching gymnastics and of coaching athletics. There is a growing tendency in the schools to offer physical training, and in many of them it is necessary for the manual training teacher to handle the physical training. A first class gymnasium and natatorium provide adequate facilities for this line of work at Stout Institute.

While the requirements for entrance remain the same each year—graduation from a four year high school course—yet every year brings a larger number of students with advanced training in college or normal or technical school, and many with a good teaching experience. While it is not always possible for these older students to spend two full years at Stout Institute, many of them find it possible to complete their studies later in summer sessions, and courses are arranged to meet their needs.

The demand for graduates increases each year, and the supply is at present about one student to every eight manual training positions for which the Institute is requested to furnish teachers. The variety of positions includes: teaching in grammar grades and in high schools, supervising manual training in public schools, and directing the work in normal schools, teaching one special subject in large city schools, and in teaching more subjects in smaller places.

The general scope of courses offered is as follows:

Professional work:—psychology and pedagogy; observation and practice teaching, organization of manual training, literature of manual training, planning of manual training courses of study, shop equipment.

Drawing Courses:—elements of mechanical drawing, advanced mechanical drawing, freehand drawing, manual training design.

Metalworking Courses:—machine shop practice, forging, foundry practice, art metal work, bent iron work, and tinsmithing.

Woodworking Courses:—elementary woodwork, elementary carpentry, joinery, wood turning, cabinet making, pattern making, wood carving and wood finishing.

General Courses:—clay work, paper, and cardboard construction, basketry and weaving, special shop work, bricklaying, cement work, plumbing, English, and physical training.

MANUAL TRAINING SCHEDULE 1911-1912

JUNIOR YEAR	Periods
Psychology and pedagogy	108
History of manual training	24
Literature of manual training	24
English	90
Freehand drawing	48
Design	72
Elementary mechanical drawing	60
Projection drawing	72
Paper and cardboard construction	48
Weaving, basketry, and bent iron	48
Clay work	48
Elementary woodwork	60
Wood turning	60
Elementary cabinet making	60
Joinery	72
Special shop work	72
Elementary forging	60
Elementary machine shop work	36
Cement work	60
Bricklaying	36
Plumbing	36
Physical training	180
Class talks	36
Total	1410

SENIOR YEAR	Periods
Organization of manual training	36
Courses of study	36
Shop equipment	36
Literature of manual training	36
Observation and practice teaching	216
Drawing and design	72
Architectural and machine drawing or Machine shop work	270
Machine drawing or Cement work	144
Upper grade woodwork or Advanced forging	108
Pattern making or Machine shop work	270
Pattern making or Advanced cabinet making	144
Plumbing or Bricklaying or Machine shop work	108
Physical training	144
Class talks	36
Total	1656

Every student taking full work for the manual training diploma must take all of the work given in the junior year. Every senior must take the full number of periods of work, but must select one course in each place where a choice is offered in the above schedule. It is required that at least one course in mechanical drawing be taken during the senior year.

It will be noted from the schedule that each course in the junior year is prescribed with the idea that every teacher of manual training should have some familiarity with the entire scope of work usually offered in schools. In order to give this breadth, it is of course necessary that each course be short. To overcome this difficulty in the senior year students are required to elect in many places such work as may have the stronger interest, and enable them to begin a line of specialization.

DOMESTIC ECONOMY DEPARTMENT

THE training school for teachers of domestic science and art has during the year 1910-1911 enrolled three hundred and eight students, which culminates a large yearly increase in attendance since the school began its work in 1903. Its remarkable growth has been due to many conditions but undoubtedly the aims governing the organization of its curriculum have been very large factors. A two year course is offered in domestic science and art which adequately prepares a young woman for teaching the subjects in the grades and secondary schools. Such preparation is possible in the time allowed because of careful elimination of subject matter and technical work not pertinent, by careful orderly development of definitely organized subject matter essential to the teachers' training, and by securing a high standard of preparation in school work. The school is the embodiment of the working out of these ideas. As breadth of education and experience are always assets, the school counts itself fortunate in having a large number of college and normal graduates, women of culture and broad experience, among the students enrolled, and the proportion of students of this class is increasing yearly.

While the main aim of the school is to train teachers of domestic science and art, the curriculum is broad enough to fit students for other vocations as well. Its graduates have gone out as dietitians, institutional managers, social workers, into positions requiring lecture and demonstration work for the public, and the training is such as every woman should have to become efficient in home life, in her relations with industries, and in the community. The demand for teachers of domestic science and art is large, including grade and high school positions, supervisors in the grades and high schools, directors of departments in high schools, normals and colleges. The school places graduates in these positions according to their fitness and assists former graduates who have proved their ability for professional advancement.

During the past year many more calls were received for graduates than the number who completed their courses during the year 1909-1910, and many former graduates were advanced to better positions. The school is always ready to be of service to deserving graduates.

The description of courses following the schedule indicates the scope of the work, the subjects of the curruiclum being grouped under the heads: professional courses, drawing and design, foods and cookery, science, domestic art, and general courses.

DOMESTIC ECONOMY SCHEDULE

JUNIOR YEAR	Periods
Psychology and Pedagogy	90
Food Study	90
Physiology and Home Nursing	90
English	90
General chemistry	108
Food Chemistry	108
Junior Cookery	216
Model Sewing	72
Plain Sewing	72
Drawing and Design	108
Mechnical Drawing	72
Physical Training	36
Total	1152

SENIOR YEAR	Periods
Dietetics	72
Organization of Domestic Science and Art	24
Observation and Practice Teaching	
Household Management	90
Bacteriology	108
Chemistry of Nutrition	108
Advanced Cooking	180
Dressmaking	216
Millinery and Art Needlework	144
Textiles	36
Primary Handwork (optional)	72
Interior Decoration and Furnishing (optional)	180
Food Adulteration (optional)	72
Home and Social Economics (optional)	90
Total	1392

During the senior year 1000 periods of prescribed work must be covered and one of the optional subjects taken in addition. The practice teaching and observation is variable in amount and considerable time is required for writing a thesis which should represent some original work on the part of the student.

HOMEMAKERS DEPARTMENT

A HOMEMAKERS department is organized to furnish instruction and training in those things a woman needs to know and do in organizing and administering the activities in the home, for which woman, as the homemaker, is responsible. This school does not give the professional instruction and training which forms so important a part of the work in the school for teachers of domestic science and art. It aims to prepare the young woman for the responsibilities and duties of the home and not for those of the school. A special bulletin is issued giving detailed information concerning the work of this school.

COURSE OF STUDY

For convenience in arrangement, the subjects are grouped under the following heads:

I. The house
   House sanitation, house decoration and furnishing, house management

II. Food study and preparation
   Chemistry, biology, physiology, dietetics, selection of food materials, care of food materials and foods, preparation of food, serving

III. Clothing and household fabrics
   Selection, cost, making and care of clothing; selection, making, and care of fabrics used for decorations and furnishings

IV. The care of children
   Child nutrition, hygiene of childhood, infant diseases and emergencies, children's clothing, child psychology, children's literature

V. Home nursing and emergencies
   Simple household remedies, care of sick room, care of bed and patient, use of antiseptics, disinfectants, and deodorants, care for accidents

VI. Home and social economics
   Woman's industrial relations, the servant problem, woman's social relations, the spending of money

VII. English
   Oral and written expression, exercises in composition, business correspondence, parliamentary practice

VIII. Literature
   A systematic course of reading

IX. Drawing
   Freehand drawing and design, mechanical drawing

X. Physical training
   Regular class work in the gymnasium and natatorium

TRADES DEPARTMENT

THIS school is organized to meet the demand for men in these trades who possess the necessary technical knowledge, and skill in applying that knowledge through modern methods in construction work. Young men are able to secure this theoretical and practical training under competent instructors in much less time than under the apprenticeship system. Even when the apprenticeship conditions are most favorable, but little knowledge of the fundamental principles underlying the correct trade processes are ever acquired by the apprentice. With the instruction and practical training given in this school, its graduates are able to command good wages at once, and to become skilled workmen within a short time after completing their course of instruction in the school. It is not claimed that the completion of either of the courses in the school will entirely take the place of practical experience in the trade, so necessary for the skilled mechanic, but that these courses of instruction, when mastered, materially shorten the time required for a full mastery of the trade, and give a much better knowledge of the principles which determine the best trade processes and practice than can be obtained in any other way.

The kind of training which this school gives not only fits men to follow directions intelligently and skillfully, but to plan and lay out work, to estimate materials and cost, and to give directions to others, important matters for those who would become foremen, superintendents, or contractors. The demand for skilled men in these two trades is steadily increasing and insures ready employment at good wages for those who complete either of the courses, and rapid advancement when the school training has been supplemented by a reasonable amount of experience.

The work in each department is designed to meet the needs of the man who has already done some work in the trade as a workman, but who wants to strengthen and broaden his preparation through systematic instruction and training adapted to his special needs. It is also designed to meet the needs of the man who has no knowledge of the trade processes or of the principles underlying them and who wishes to take the necessary steps to become a skilled workman with capacity for leadership, in the shortest possible time.

The following outlines are given to indicate the scope of work offered in both the Plumbing Trade School and the Bricklaying Trade School. Exercises involving the different operations are given first, and these are followed by practical applications as parts of new buildings or pieces of new equipment.

A special circular giving details of the trade school courses is issued, and will be sent upon application.

PLUMBING TRADE SCHOOL COURSES

I. The cutting and threading of iron pipes
II. The use of unions, right and left elbows, and couplings
III. The running of soil pipe lines with verticle and horizontal joints
IV. The making of caulked joints as used by plumbers
V. Care and use of plumber's gasoline furnace
VI. Wiping a typical joint
VII. Use and care of the soldering iron
VIII. The making of casts and overcast joints and running seams
IX. Setting up and installing fixtures
X. Arithmetic applied to the problems of practical plumbing
XI. Mechanical drawing of piping layouts and setting up of fixtures

BRICKLAYING TRADE SCHOOL COURSES

I. Mixing and spreading of mortar
II. Laying of brick wall with cross joints
III. Study of bonding and building of nine inch walls
IV. Use of Flemish, English, and Dutch bond in thick walls
V. Building of chimneys,—detached and in party walls
VI. Making of forms for arches and building arches
VII. Construction of walls with various openings
VIII. Setting window and door frames
IX. Fire place work,—mantel construction and flue arrangement
X. Panel and cornice work and decorative bricklaying
XI. Building of circular and octagonal columns
XII. Interior and exterior paving and tile setting
XIII. Arithmetic applied to bricklaying and cement work
XIV. Mechanical drawing for bricklayers

GROWTH OF STOUT INSTITUTE

THE Stout Training Schools for teachers of manual training and domestic economy, and for the kindergarten were inaugurated as a part of the public schools of Menomonie, Wisconsin, in 1903, and Stout Institute was incorporated as an independent organization in 1908. The kindergarten department, which began its work in 1899, was discontinued in 1909. Summer schools have been carried on since 1906. The Homemakers school was started in 1907. Trade schools for plumbers and bricklayers were started in 1908. The following table shows the growth of the Institute during the last eight years.

ENROLLMENT BY YEARS

Departments	1903-4	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11
MANUAL TRAINING	3	15	20	27	41	46	63	73
DOMESTIC ECONOMY	21	36	38	47	65	124	227	308
OTHER DEPARTMENTS	35	31	34	36	40	73	28	27
	59	82	92	110	146	243	318	408
SUMMER SCHOOL			21	48	93	152	197	
Totals	59	82	113	158	239	395	515	

STATES REPRESENTED

The following table represents the influence of this school as to the number of states which have sent students to Stout Institute and those who have employed its graduates.

States Represented by Students in Regular Sessions		States Represented by Students in Summer Sessions		States in which Graduates have been employed	
New York	Kansas	Maine	North Dakota	New York	Iowa
Pennsylvania	Oklahoma	Massachusetts	South Dakota	New Jersey	Missouri
Ohio	Texas	New York	Nebraska	Pennsylvania	Arkansas
Indiana	Montana	New Jersey	Kansas	Delaware	Louisiana
Kentucky	Wyoming	Virginia	Oklahoma	Virginia	North Dakota
Michigan	Colorado	South Carolina	Texas	West Virginia	South Dakota
Illinois	Idaho	Ohio	Montana	North Carolina	Nebraska
Wisconsin	Utah	Indiana	Wyoming	South Carolina	Kansas
Minnesota	Arizona	Michigan	Colorado	Georgia	Oklahoma
Iowa	Washington	Illinois	Utah	Ohio	Texas
Missouri	Oregon	Wisconsin	Arizona	Indiana	Montana
Louisiana	California	Minnesota	Washington	Kentucky	Colorado
North Dakota	Canada	Iowa	Oregon	Tennessee	Idaho
South Dakota	Cuba	Missouri	California	Alabama	Utah
Nebraska		Arkansas	Canada	Mississippi	Arizona
				Michigan	Washington
				Illinois	Oregon
				Wisconsin	California
				Minnesota	Porto Rico
27 States, Canada, and Cuba		29 States and Canada		37 States and Porto Rico	

This represents in all 40 states, Canada, Cuba, and Porto Rico, which have been represented at Stout Institute by students or graduates.

The present enrollment shows a representation from 23 states and Canada. Graduates are now employed in 35 states and Porto Rico.